IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. – 14.   (Canceled)

15.   (Original)   A method of servicing an engine requiring fuel injector replacement comprising the steps of:

identifying a fuel injector in need of replacement by cylinder number;

establishing communication between a service computer and an ECU of the engine;

downloading ECU, engine, and fuel injector data from the ECU to the service computer;

writing replacement fuel injector time delay data in the ECU for a replacement fuel injector for the cylinder number identified; and

installing the replacement fuel injector in the cylinder number identified.

16.   (Original)   The method of claim 15 wherein the step of downloading further includes downloading existing fuel injector time delay data and the method further includes the steps of storing the existing fuel injector time delay data, and restricting a user to restoring the existing fuel injector time delay data in the engine from which it was downloaded.

17.   (Original)   The method of claim 16 further comprising the steps of:
displaying an injector serial number and injector type for each cylinder;

determining if the replacement fuel injector time delay data has been uploaded previously; and if so,

determining whether any injector serial number in the engine matches a serial number of the replacement fuel injector; and if so,

allowing restoration of the existing fuel injector time delay data.

18.   (Original)   The method of claim 15 further comprising the steps of:

reading the written replacement fuel injector time delay data back from the ECU;

displaying the cylinder number in which the replacement fuel injector is to be installed; and

verifying the written replacement fuel injector time delay data with the replacement fuel injector time delay data.

19.   (Original)   The method of claim 15 further comprising the steps of:

supplying a production fuel injector having a time delay wherein the production fuel injector is tested to determine a particular time delay; and

supplying a computer readable storage medium with the production fuel injector wherein the computer readable storage medium has stored thereon time delay data that correspond to that particular production fuel injector and a computer program that is capable of causing the service computer to execute the steps of downloading, writing and installing.

20.   (Currently Amended) A fuel injector service pack comprising:

(A) a ~~single~~ replacement fuel injector having a specific time delay that is experimentally determined for that particular fuel injector; and

(B) a computer readable storage medium having stored thereon:

(i) a data file containing a serial number and the specific time delay for the ~~single~~ replacement fuel injector; and

(ii) a computer program comprising instructions which, when executed by a computer, cause the computer to:

(1) allow identification of a cylinder in a fuel injected engine for which a fuel injector is to be replaced;

(2) read and store existing fuel injector time delay data from an ECU of the fuel injected engine; and

(3) write the particular time delay from the data file to the ECU for use with the ~~single~~ replacement fuel injector.

21.   (Original)   The fuel injector service pack of claim 20 wherein the computer readable storage medium further comprises a log file that is used by the computer

program to track how the data file is used and ensure that the specific time delay is not used with another fuel injector.

22.   (Currently Amended) The fuel injector service pack of claim 20 wherein the computer program further causes the computer to:

allow restoration of the existing fuel time delay data if the single-replacement fuel injector did not solve a user problem and restricts use of the existing fuel injector time delay data and the original fuel injector by:

writing a serial number of the single-replacement fuel injector to the ECU when the custom time delay data are written to the ECU;

if the last use of the computer program was to replace data, read and compare each fuel injector serial number in the ECU with the serial number of the single replacement fuel injector as stored in the data file; and if a match is present:

allow the existing fuel injector time delay data to be written back into the ECU; and

direct that the original fuel injector be installed in the cylinder identified.

23. – 44.   (Canceled)